

an outer sleeve having a terminating end sandwiched between said pair of annular upset beads of said inner sleeve, said outer sleeve further having an inner diameter circumscribing said hose, said inner diameter of said outer sleeve further having at least one depression formed by a crimping operation, said at least one depression being concentric with said at least one groove of said inner sleeve, wherein said at least one depression interlocks with said hose to further resist axial movement of said hose relative to said hose coupling; and

a reinforcing ring positioned within said at least one groove in said inner diameter of said inner sleeve and concentric with said area of peak crimp force, whereby said reinforcing ring resists deformation of said inner sleeve during said crimping operation, said reinforcing ring having an inner diameter at least as great as said inner diameter of said inner sleeve, whereby said reinforcing ring permits full cross sectional fluid flow through said hose coupling.

In the Abstract

ABSTRACT

A hose coupling using at least one reinforcing ring to reinforce a hose coupling during a crimping process, the hose coupling having an inner sleeve, an outer sleeve coaxial with the inner sleeve, and a hose coaxially interposed therebetween. During the crimping process a crimping force is applied directly to the outer sleeve to form at least one depression that results in an area of peak crimp force on the inner sleeve, the depression helping to seal and lock the hose between the inner and outer sleeves. The reinforcing ring is positioned within the inner sleeve and concentric with the area of peak crimp force on the inner sleeve. Consequently, the reinforcing ring prevents the inner sleeve from deforming under the crimping force, thereby ensuring the integrity and long-term durability of the hose